

# FIRST LANGUAGE ACQUISITION

Method,  
Description and  
Explanation

David Ingram

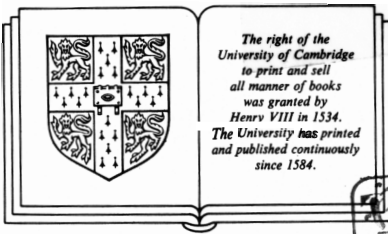
# First Language Acquisition

## *Method, Description, and Explanation*

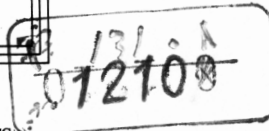
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*For my mother,  
Mary Strailman*



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# Preface

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This enterprise officially began in April, 1984, in the Dallas–Fort Worth airport while I was undergoing a seven-hour flight delay. The original idea, conceived a year earlier, was to present an exhaustive encyclopedic review of child language. My feeling at the time was that the field contained a massive literature which was being lost in recent years. In that year, however, my orientation changed rather dramatically. For one thing, my own work was concentrating on methodological issues in analyzing phonological and grammatical samples from children. Methodology took on a greater importance for me than it had ever done before. At the same time, the field began a self-assessment, which still continues, of its theoretical underpinnings. The collection of data for its own sake came under particular criticism, and new theoretical issues came to the forefront regarding the learnability of linguistic constructions and the relevance of acquisition data for linguistic theory. By the onset of writing, therefore, my goals had changed considerably. I now saw my purpose as one of providing a more balanced view of methodology, descriptive review, and theory.

As should have been expected, this ambitious enterprise took a long time, slightly over three years, to complete. One problem, of course, was trying to maintain the balance between these three areas. With any particular study, I have tried to discuss the issues at stake, the relevant methodological decisions, and the most appropriate and insightful literature available. One consequence of this was a sacrifice in the area of descriptive review. It was impossible to provide exhaustive literature reviews while simultaneously giving in-depth methodological and theoretical information. Instead, I opted for a selection of representative studies in the areas covered. The belief was that the deeper coverage of selected studies would better prepare the reader to undergo his or her own reading of other works than would a superficial and incomplete treatment of a larger number of studies.

Despite the decision to restrict the literature review, the book still ended up being much longer than expected. Even so, it still only covers the core areas of phonology, morphology, syntax, and semantics. The potential



effects of parental speech are discussed, but only in relation to these core areas. Relatively little is said about areas such as pragmatics and conversational patterns, and nothing appears on related areas such as second language acquisition, bilingualism, twin speech, language disorders, or spelling. Their inclusion would have led me into additional volumes. In addition, material originally intended for the text has since been eliminated, to be included instead in a separate accompanying Workbook. This material includes information on language sampling, bibliographies, review questions, and exercises.

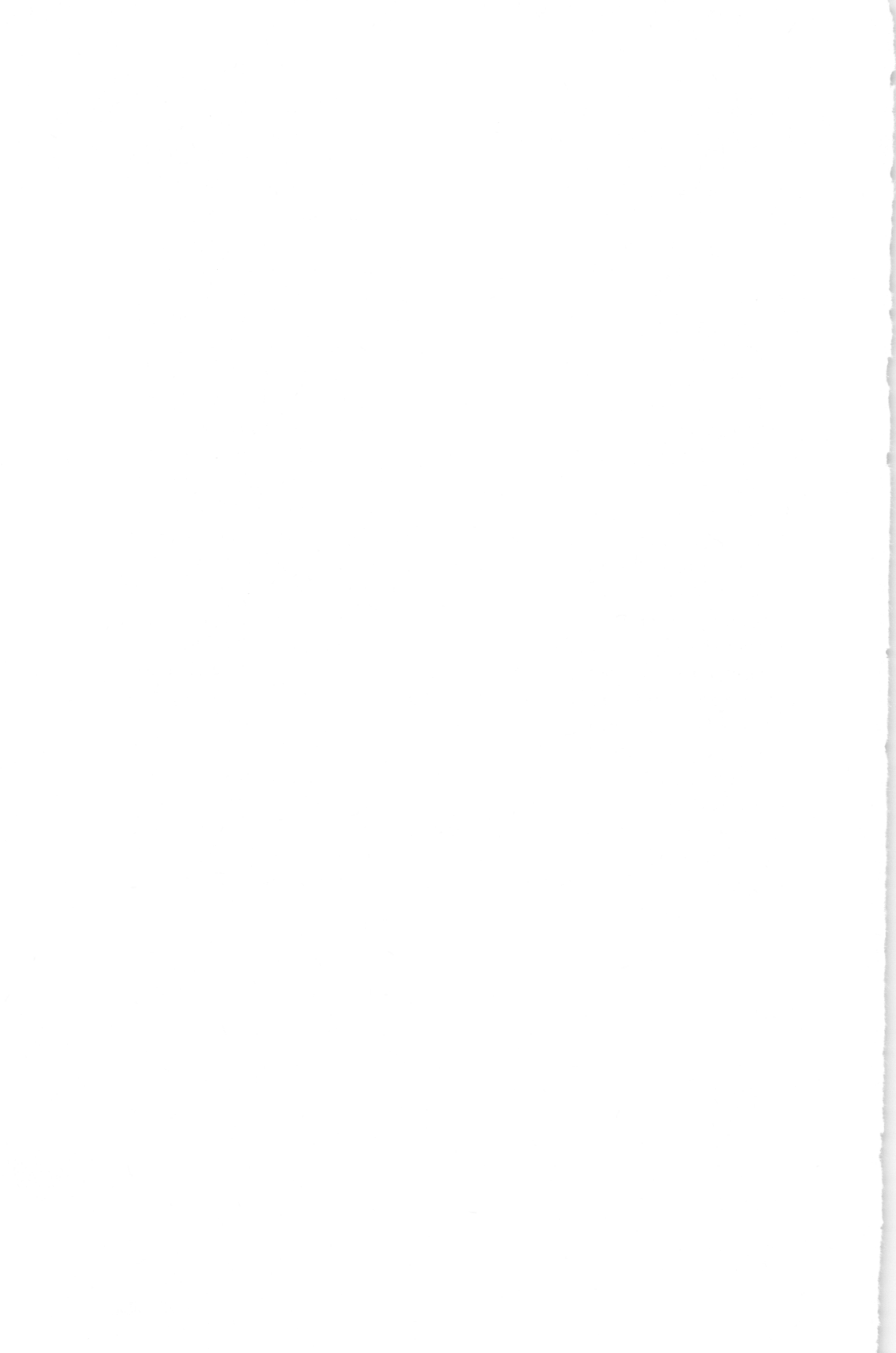
This brings me to the potential audience. The book is directed towards those interested in the acquisition of the structure of language, rather than its use in everyday conversation. Further, it is for those who are relatively serious about the field of child language acquisition. Students who would use it are primarily those who are in either upper-level undergraduate or graduate courses. I have, for example, used it during the last three years in an undergraduate course for linguistics students which requires a previous course in linguistics. I also hope it will be of value to professionals in the field. One group might be researchers who would like a more detailed review of areas outside their primary research interests. Another potential reader is the practicing language clinician who would like to update his or her knowledge of normal language acquisition.

To acknowledge all those who contributed either directly or indirectly to the book would require pages. Certainly all the authors of the numerous works I have read over the last twenty years deserve recognition for their contributions to our field. I would like, however, to single out a few individuals who have played an important role in my thinking in some of the areas of language acquisition. Part of my continued interest in phonological acquisition is no doubt motivated by the wonderful colleagues I have in this area. These include Mary Louise Edwards, Larry Leonard, John Locke, Marcy Macken, Lise Menn, Richard Schwartz, Larry Shriberg, and Carol Stoel-Gammon. My understanding of grammatical and semantic acquisition has been greatly assisted by the opportunity to discuss the area, either briefly or at length, with people such as Elizabeth Bates, Lois Bloom, Martin Braine, Robin Chapman, Richard Cromer, David Crystal, Bruce Derwing, Paul Fletcher, Alan Kamhi, Judith Johnston, Stan Kuczaj, Brian MacWhinney, Jon Miller, and Catherine Snow. My knowledge of the more recent research from a nativist perspective owes a debt to discussions with, and the opportunity to hear presentations by, Stephen Crain, Helen Goodluck, William O'Grady, Marianne Phinney, Janet Randall, Tom Poeper, Larry Solan, and Ken Wexler.

I would like to single out four people for a special intellectual acknowledgement. During most of the writing of the book, I have had the unique

opportunity to have regular interactions with four of the finest minds I have ever met – Guy Carden, Henry Davis, Heather Goad, and Cliff Pye. I cannot conceive of a richer environment in which to attempt such an undertaking. Guy, a theoretical linguist with an appreciation of the value of acquisition data, was always ready to drop what he was doing to go over a draft or discuss a particular difficult theoretical point. I have never met anyone *so* willing to give of his time to aid the work of others. Henry has a better combined grasp of theoretical linguistics and the child language literature than anyone I have ever met. I have enjoyed watching him play the devil's advocate, both with theoretical linguists and data-oriented researchers in child language. His **1987** doctoral dissertation is an outstanding theoretical contribution on language acquisition. Heather is a former undergraduate student in our department who is now studying for her doctorate in linguistics at the University of Southern California. She has a keen eye for detail and was very quick to push for evidence when theoretical claims were discussed in our seminars on language acquisition. Cliff came to UBC as a postdoctoral fellow after completing his excellent dissertation on the acquisition of Quiché. For two years I had the opportunity to discuss the text with him on a daily basis. More than to anyone, I owe him a special thanks for his constant input. When he left in 1986 to take up a position at the University of Kansas, he left as both a colleague and a close friend.

I would like to make a personal acknowledgement to my children Jennika and Daniel. During the last three years I have tried to allot my writing time so that it would not take away too much from time that I spent with them. Even *so*, there were occasions when things had to get done, or when the stress and preoccupation with the task no doubt left me less than energetic. They were always supportive, however, and their occasional arm around the shoulder, as we peered into the computer screen, gave me more support at times than they ever realized. Lastly, I want to acknowledge the lifelong support of my mother, Mary Strailman, to whom this book is dedicated.



# 1 Introduction

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The study of children's language acquisition is a field that comprises a large body of literature, dating back well over one hundred years. To make sense of these works, however, is no easy task. One reason for this is that the topic is one without a discipline. There are virtually no university departments of language acquisition (or child language as it is often called), and only one major journal is devoted to it (*The Journal of Child Language*, since 1974). Instead, we have language acquisition subfields of other areas such as linguistics, psychology, education, and communication disorders. As may be expected, these disciplines approach the topic from very different perspectives. The result has been a handful of general texts from the view of one or another of these disciplines, often to the virtual exclusion of others.

This book is consistent with this trend in one sense – it will use as its foundation the current interests of the field of linguistics. It will differ, however, in that it will attempt to transcend a limited linguistic view, and discuss works and issues that have been produced in the other disciplines above. To do this, it will deal with three central aspects of the study of language acquisition: methodology, description, and explanation.

By METHODOLOGY I mean the ways in which one decides to approach the data of language acquisition. If there is any single void in the booklength treatment of language acquisition, it is the discussion of how to do or practice it. This dimension covers several topics, from data collection to the reasons for data collection. Here, the following methodological areas will be covered:

1. techniques of data collection – from spontaneous language sampling to experimental procedures such as elicited imitation, comprehension testing, and metalinguistic judgements;
2. techniques of linguistic analysis, focussing on grammatical and phonological analysis;
3. aspects of measurement – that is, how to decide on appropriate measures for the analysis of data from both experimental and naturalistic studies;



## 2 INTRODUCTION

4. approaches to data – from the formulation of testable hypotheses from linguistic theory to the establishment of inductive generalizations from the analysis of children’s language.

These are the various procedures needed in order to collect reliable information on the language of young children.

A second characteristic of child language is that over the years it has accumulated a great deal of information on children’s linguistic behavior. For example, we know a lot about when certain behaviors appear, such as the first words, the kinds of things children say, and the kinds of errors they make. This body of knowledge does not pretend to explain anything, in the sense of providing a theory of development, but it constitutes the facts to be explained. The presentation of the current state of what we know children do constitutes the DESCRIPTION of language acquisition. This book attempts to provide an in-depth review of these facts, and tries to separate facts from explanations. For example, to say that a child is at the two-word stage does not explain anything, but provides something to be explained.

The discussion of the descriptive aspect of language acquisition will be conducted by a presentation of the following traditional periods of acquisition:

1. prelinguistic development – birth to end of first year;
2. single-word utterances – from around 1 year to 1½ years of age;
3. the first word combinations – from around 1½ to 2 years of age;
4. simple and complex sentences – the third year of life.

By this point the normal child can be said to have mastered the rudimentary aspects of most aspects of language, and I do not discuss in any detail the subsequent development, from age 4 up to adulthood. That period is represented by a substantial literature that would require another book-length treatment of its own.

The above periods are described in terms of grammatical developments, but this is done only to provide a frame of reference. For each period, information will be provided on phonological, semantic, and syntactic development, and the child’s linguistic environment. The discussion in these sections looks carefully at reported findings and selects just those that appear to result from reliable research. To do this, the focus will be on depth instead of breadth. Rather than just reporting superficially on the results of several studies, I will concentrate in more detail on selected studies of significance. This approach is based on the assumption that careful scrutiny of the studies on language acquisition is necessary to establish what is actually known.

The last and most difficult area of language acquisition is EXPLANATION,

that is, the construction of a theory of language acquisition. Such a theory will account for how the child acquires language, based on the linguistic input. This discussion will include the following:

1. an examination of behaviorist, maturationist, and constructionist views of language acquisition;
2. the discussion of the notion of 'explanatory' stage, as contrasted with 'descriptive' stage;
3. the proposal of several assumptions about language acquisition that will allow us to formulate testable hypotheses;
4. the concentration on the relation between the child's linguistic competence and performance.

Very early in the book I lay out the theoretical assumptions underlying much of the methodological and descriptive information. It is taken for granted that the latter two pursuits are only interesting to the extent that they lead to principles which help explain how the child acquires language.

While these three aspects provide the focus of the book, they are not presented as separate sections, but are intertwined throughout. The actual structure of the book is as follows. Part I, 'Foundations', attempts to initiate the reader into the major methodological, descriptive, and explanatory issues. I discuss the primary methods used to study children's language, and concentrate especially on the method of the spontaneous language sample. The reader is encouraged to carry out an actual language sample if she or he has not yet done so in order to bring to the studies discussed later the necessary critical appreciation. This overview also includes a historical review of the field and of how various methodological and explanatory developments have occurred. The notion of 'stage' is carefully considered, since it is a term widely used in the literature.

Part II, 'Milestones', provides an introductory treatment of the main descriptive periods. As far as possible, within the limits of current knowledge, I give what is known about the child's receptive ability, followed by a discussion of expressive ability at the same point in development. This is done to show over and over how the child's receptive ability precedes and influences expression. In other books this aspect is often ignored or underemphasized, with the emphasis instead on expressive language only. This part also repeatedly examines the extent to which we can make claims about the child's rule system, based on linguistic behavior. As far as possible, we will assume that the child's behavior reflects competence, unless explicit performance factors can be isolated.

Part II also provides a detailed discussion of how to analyze children's language. Explicit suggestions are made on how to do phonological, morphological, and syntactic analyses. A recurrent theme will be the issue

of 'productivity'. This is the concern with separating the child's linguistic forms which are rule-based from those which are imitated or rote-learned. It is the rule-based or 'productive' forms which reveal the most about the child's internal linguistic system.

A major goal of the book is to provide the reader with the ability to practice the field of language acquisition, not just learn about it. Such an ability requires awareness of all three areas discussed above. We need to establish principles that explain language acquisition, principles that are falsifiable through the description of children's behavior, behavior that reliably represents the child's linguistic knowledge. The course of the relation between these three can begin with any one and be traced to the others.

### *Further reading*

There have been several introductory texts on the study of language acquisition of children. The two most used ones appear to be Dale (1976) *Language development: structure and function*, and de Villiers & de Villiers (1978) *Language acquisition*. A recent book of chapters contributed by different authors is *Language acquisition*, edited by Fletcher and Garman (1979, 2nd edn 1986). Still another recent book, Oksaar (1983) *Language acquisition in the early years*, has been translated into English from the original German of 1977. A recent text from a Piagetian perspective is *Language development from birth to three* by Anisfeld (1984). Earlier efforts at a text include McNeill (1970a), Menyuk (1971), Cazden (1972), and Bloom & Lahey (1978). There is also a highly readable introduction contained in Clark & Clark (1977).